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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,510	05/21/2007	Eugen Kloos	LZ-116PCT	1654
40570	7590	08/25/2010	EXAMINER	
Lucas & Mercanti LLP 475 Park Avenue South New York, NY 10016			BURCH, MELODY M	
		ART UNIT	PAPER NUMBER	
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		MAIL DATE		DELIVERY MODE
		08/25/2010		PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/591,510	<b>Applicant(s)</b> KLOOS ET AL.
	<b>Examiner</b> Melody M. Burch	<b>Art Unit</b> 3657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

#### Status

- 1) Responsive to communication(s) filed on 01 September 2006.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-16 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 01 September 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/GS-68)  
 Paper No(s)/Mail Date 9/1/06
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date: \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Specification***

2. The abstract of the disclosure is objected to because it exceeds 150 words and in line 3 the term "bake" should be changed to --brake--. Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because of the following informalities: the patent application lacks the proper headings particular to US patent format such as "Background of the Invention", "Summary of the Invention", etc.

Appropriate correction is required.

***Drawings***

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of the connecting device being radially closer to the brake disk on the brake disk run-out side than on a brake disk run-in side, at least in the region in which it spans the brake disk as recited in claim 1 and the limitation of the opening having a concave contour on the brake disk run-in side and a more or less linear contour on the brake disk run-out side as recited in claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Examiner notes that figure 9 of the instant invention shows the connecting device 1.3 being radially closer to the top of the brake disk on the

left side of the line passing through "M." Accordingly, Examiner interprets the left side of the line passing through "M" as the run-out side. However, in figure 12 the concave countour is shown on the left side of the brake structure which was previously determined to be the run-out side based on the recitations of claim 1 while claim 10 recites that the concave contour is on the run-in side.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claims 1 and 10. It is unclear to the Examiner as to which side is the run-out side and the run-in side. In claim 1 the claim recites that the run-out side is the side in which the connecting device is radially closer to the brake disk. As best understood, the left side of figure 9 is the run-out side because the connecting device 1.3 is radially closer to the top of the brake disk. However, in figure 12 the left side of the brake device has the concave contour but claim 10 recites that the concave contour is on the run-in side. In other words, claim 1 suggests that the left side of the brake device is the run-out side while claim 10 suggests that the left side of the brake device is the run-in side.

Re: claims 8, 10, and 11. Claims 8, 10, and 11 recite the limitation "the projection" in line 3 in claim 8. There is insufficient antecedent basis for this limitation in the claim.

Re: claims 9, 10, and 13. The phrase "more or less" first recited in the last line of claim 9 is indefinite. The phrase fails to clearly define the metes and bounds of the claims. Also with respect to claim 13, the term "preferably" is indefinite.

The remaining claims are indefinite due to their dependency from claim 1.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

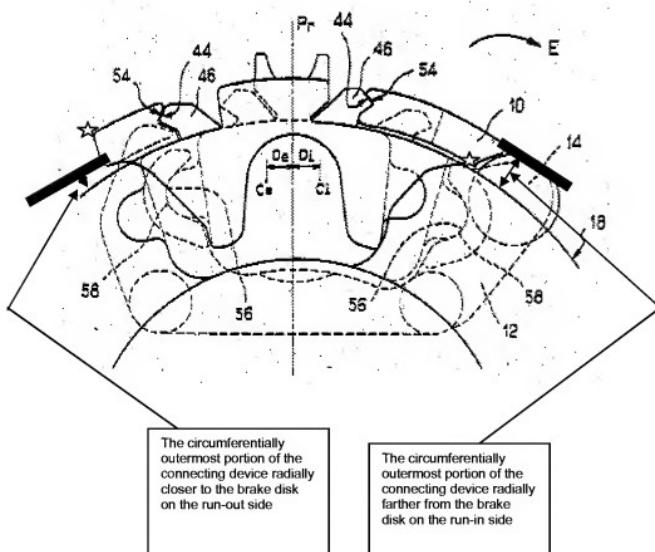
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-8, 10-12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4632227 to Mery et al.

Re: claims 1 and 3-8. Mery et al. show in figure 1 a disk brake with a brake disk 18 that has a preferred direction of rotation; a first brake pad 40 with a first center of gravity  $C_i$  on a first side of the brake disk 18; -- a second brake pad 42 with a second center of gravity  $C_e$  on a second side of the brake disk ; -- a caliper 10 for transmitting the braking forces generated by the second brake pad to the first side of the brake disk, with a first caliper arm or arm on which element number "38" is located on the first side of the brake disk, a second caliper arm or arm on which reference character "De" is located on the second side of the brake disk, and a connecting device (one portion shown at the bottom of the lead line of number 56 and the other portion shown in the area of the end of the lead line of number 10) for joining the first caliper arm with the second caliper arm; and a clamping device 36, which has a center axis perpendicular to the brake disk and is designed to force the first brake pad against the brake disk, wherein the second center of gravity, both in the position of rest of the brake and when the brake is actuated, is offset relative to the first center of gravity by a predetermined first distance in the direction of a brake disk run-out side corresponding to the preferred

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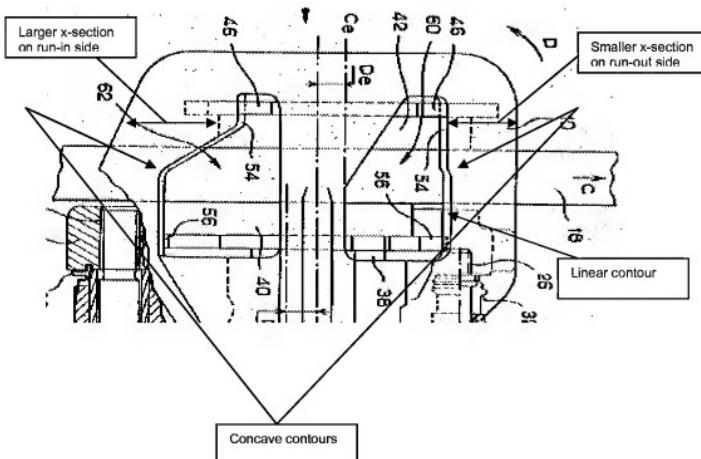
direction of rotation of the brake disk as shown in figure 1, and the second caliper arm is offset relative to the first caliper arm by a predetermined second distance in the direction of the brake disk run-out side as shown in figure 1, characterized by the fact that wherein the connecting device is radially closer to the brake disk on the brake disk run-out side than on a brake disk run-in side, at least in the region in which it spans the brake disk as shown in figure 2.



Alternatively, one could interpret the claim such that the circumferentially inner portion in the area of the right star in the annotated figure on pg. 6 is the connecting device radially closer to the brake disk on the run-out side and the circumferentially inner portion of the connecting device in the area of the left star in the annotated figure on pg. 6 is the connecting device radially farther from the brake disk on the run-in side.

Re: claim 2. See figure 2 of Mery et al.

Re: claims 10-12. Mery et al. show in the annotated figure below the limitation wherein in the projection parallel to the brake disk, the opening has a concave contour on the brake disk run-in side and a more or less linear contour on the brake disk run-out side and that this more or less linear contour forms an acute or obtuse angle with the plane of the brake disk.



Re: claim 14. Mery et al. show in figure 1 the limitation of a plate-shaped support structure 12.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mery et al.

Re: claim 9. Mery et al. show in figure 4 the limitation wherein the contour of the opening is more or less that of a parallelogram, as best understood, in order to fit within the particular real estate constraints. In *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration was significant.

Re: claim 13. Merty et al. show in figure 4 the limitation wherein the outer contours (one shown below the end of the lead line of number 18 and the other shown below the end of the lead line of 12) of the caliper on the brake disk run-in side and the

brake disk run-out side are more or less parallel to each other and preferably perpendicular to the plane of the brake disk. In *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration was significant.

11. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merty et al. in view of US Patent 5568845 to Baumgartner et al.

Merty et al. are silent with regards to the disk brake being pneumatically and/or electromotively actuated.

Baumgartner et al. teach in col. 1 lines 9-11 the use of a disk brake being pneumatically actuated and for use in commercial vehicles.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the disk brake of Merty et al. to have been pneumatically actuated as taught by Baumgartner et al., in order to provide a means of pressing the pads against the brake disk to decelerate the vehicle.

### ***Conclusion***

12. In order to complete the record, it should be noted that no conflict appears to presently exist between the subject matter defined by the instant claims and the subject matter of the claims of applicant's and/or assignee's copending application US 2006/0289256 to Kloos et al. and US Patent 7461725 to Kloos et al. which have been made of record. Accordingly, no double patenting rejection is entered into the instant application. See MPEP 804+ concerning double patenting type of rejections, if

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necessary. Applicant and/or assignee should maintain this clear line of patentable distinction between the instant claims and the claims of the indicated patent application.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents: 4533025 to Carre, 3322236 to Burnett, and 5117949 to Buckley et al. teach the use of disk brakes in which one pad is offset from the other pad located on the opposite side of the brake disk.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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August 23, 2010

/Melody M. Burch/  
Primary Examiner, Art Unit 3657